

RESOLUTION OIV-VITI 641-2020

OIV GUIDE FOR THE IMPLEMENTATION OF PRINCIPLES OF SUSTAINABLE VITIVINICULTURE

WARNING: This resolution repeals the following resolutions:

- CST 1/2008
- OIV-VITI 422-2011

THE GENERAL ASSEMBLY,

CONSIDERING the resolutions:

CST 1/2004 providing the definition, objectives and implementation steps of sustainable vitiviniculture,

CST 1/2008 providing guidelines for implementing environmental sustainability in the vitivinicultural sector,

OIV-VITI 422-2011, providing guidelines for sustainable viticulture adapted to table grapes and raisins covering production, storage, drying, processing and packaging of products,

And OIV-CST 518-2016 defining the five general principles of sustainable vitiviniculture while considering equally environmental, social, economic and cultural aspects,

CONSIDERING that there is a great diversity of vitivinicultural environments and grape and wine production systems on which the various factors contributing to sustainability have a different impact,

CONSIDERING the need to promote global harmonisation of sustainability approaches applied worldwide, while understanding that one size does not fit all,

CONSIDERING the need to provide comprehensive and concrete tools that illustrate the application of sustainability principles in vitiviniculture and thus facilitate their acceptance,

CONSIDERING that there are many different and potentially equally appropriate approaches to evaluating a system of actions for sustainable development,

CONSIDERING the general need to understand the sustainability concept and its implications,

CONSIDERING article 2.2.k of the Agreement of the 3rd April 2001, one of the

activities of OIV is “to contribute to the promotion or recognition of the world vine- and wine-growing heritage and its historical, cultural, human, social and environmental aspects”,

CONSIDERING that the regional culture forms its identity and specificity, and that the vitivinicultural production has always been an important component in the constitution of the image of a viticultural region,

CONSIDERING that the resolutions CST 1/2008 and OIV-VITI 422-2011 require periodical revision and that they need to be updated based on the principles established by Resolution OIV-CST 518-2016,

DECIDES to adopt the following “OIV Guide for the implementation of principles of sustainable vitiviniculture”,

DECIDES to withdraw the resolution CST 1/2008 “OIV guidelines for sustainable vitiviniculture: production, processing and packaging of products” and the resolution OIV-VITI 422-2011 “OIV Guidelines for sustainable viticulture adapted to table grapes and raisins: production, storage, drying, processing and packaging of products” as these resolutions cover only the environmental aspects of sustainability,

DECIDES that the various OIV guidelines for sustainable vitiviniculture should be regularly revised and updated (3 years period is recommended) and supplemented, under the basis of the principles here established.

OIV Guide for the implementation of principles of sustainable vitiviniculture

RESOLUTION OIV-VITI 641-2020

OIV GUIDE FOR THE IMPLEMENTATION OF PRINCIPLES OF SUSTAINABLE VITIVINICULTURE

OIV Guide for the implementation of principles of sustainable vitiviniculture

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1. Part 1: General considerations

1.1. Introduction

In 2016, the OIV adopted the Resolution OIV-CST 518-2016 “**OIV General Principles of Sustainable Vitiviniculture – Environmental – Social – Economic and Cultural Aspects**”, which reminds the definition of sustainable production (as provided in the

resolution OIV-CST 1-2004) as well as defines its general principles applied to all vitivinicultural products.

The present document is a practical guide for an organisation of the vitivinicultural sector wishing to promote and apply the general principles of sustainability.

- For the purposes of this document, an **organisation** means an entity or group of people and facilities with an arrangement of responsibilities, authorities and relationships and identifiable objectives. This document is particularly addressed to organisations producing the following products: grapes (table grapes, dried grapes and wine grapes), wine, special wine and vitivinicultural spirits, grape juice and nectar.
- Governments in their sovereign roles (legislative, executive and judicial), in their activity of developing public interest policies and aimed at honouring international obligations are not considered organizations.

The present document provides recommendations on how an organisation of the vitivinicultural sector can translate and adopt the “General principles of sustainable vitiviniculture” (resolution OIV-CST 518-2016) in its activities.

Are provided in this document:

- General description of the management process for planning and implementing a sustainability approach within an organisation,
- Recommendations for actions that could be undertaken by an organisation so as to contribute to sustainability outcomes,
- Various planning and organisational tools

1.2. From general principles of sustainability towards their endorsement and implementation by the vitivinicultural sector

Sustainable development is a guiding principle of development policies firstly defined and widely recognised thereafter by the 1987 Report of the UN World Commission on Environment and Development: “Our Common Future”.

Today the definition of sustainable development, as adopted in 2015 by the United Nations in its 2030 Agenda for Sustainable Development, consists of 17 Sustainable Development Goals. This new agenda includes goals like “responsible consumption and production”, “sustainable cities and communities”, “affordable and clean energy”,

“life on land and life below water”.

In 2016, when Paris Agreement on Climate Change entered into force, the need to limit the rise of global temperatures was added to sustainability goals.

Sustainable development goals cannot be achieved only by public policies. Participation of private enterprises and organisations is necessary.

The vitivinicultural sector must play his role in the achievement of sustainability goals by implementing initiatives that take into account its specific characteristics:

- It has a strong link with the territory, its history, culture and customs
- It is based on agricultural production which can not be delocalised, requiring specific know-how and which generates employment in a rural area on all levels of competencies: from agricultural workers to managers
- It manufactures products of high-added value and important export potential
- It uses endogenous resources of the genetic diversity of grape vine (ancestral grape varieties, new grape varieties, genotypic diversity within grape varieties) contributing to valuing and conserving them
- It plays an essential role in the creation and preservation of landscapes
- Is a major factor identifying a region – has an important potential for the development of tourism
- Is affected by the impacts of climate change and societal changes
- Is open to technological innovations
- A sector wheresectoral organisations prevail making it possible to generate and implement collective strategies
- It assumes its responsibility towards sustainability goals of the United Nations Organisation

Main challenges for the vitivinicultural sector in adapting sustainability approach

Maintain a sustainable market in line with societal expectations both inside and outside the organisation, while supporting competitive productive and economic issue.

Improve society confidence in vitivinicultural companies through the implementation of a sustainability approach.

Develop a sustainable vitivinicultur with a dual objective of preventing negative environmental impacts and adapting to the climate change, thanks to the adaptation of production practices

1.3. The role of sectoral bodies in the sustainability of the vitivinicultural sector

The vitivinicultural sector is characterised by a very strong presence of various types of **sectoral bodies**. These can be inter-professional bodies, professional associations, various kinds of consortia, associations of producers, etc. Their role and involvement in organizing the vitivinicultural sector may vary from country to country and from one type of organization to another. Even if they are not directly involved in the production process, these professional organizations contribute to shaping the vitivinicultural sector and formulating and implementing collective strategies.

This particularity of the viticultural sector gives it an advantage of possible collective synergies regarding its future challenges, and consequently, timely and adequate adaptation to newly arising challenges.

While this document is more focused on formulation of practical guidance for all types of organisations **directly involved in production** of vitivinicultural products (providing examples of actions to be conducted, management tools, possible indicators, etc.), the role of sectoral bodies in the definition and operation of sustainable strategies by producing organisations should be particularly underlined.

The role of these collective organisations in introduction, formulation and application of sustainability approaches can be summarised as follows:

1. Sharing of knowledge: support in conducting participatory and multi-stakeholder sectoral reviews and identification of sustainability accelerators and issues to be addressed
2. Leading the way: definition of roadmaps, and focusing objectives
3. Sharing and mutualising tools, methodologies and actions
4. Sharing and mutualising results: provision of necessary support and tools to allow benchmarking between organisations, so as to be able to follow progress and adjust collective objectives.
5. Ensure such indicators are comparable among participants to allow monitoring of collective and individual sustainability progress.
6. Providing operational support: support for fundraising (public or private), organising training and capacity building activities, cost sharing of the eventual application for certification scheme, etc...

7. Driving innovation
8. Providing technical assistance
9. Sharing communication strategy and raising awareness-
10. Interaction with public authorities so as to exchange on sectorial needs, as well as to seek synergies and support in the development of the sustainability policies.

2. Part 2: Integrating sustainability throughout an organization

2.1. Identification and hierarchisation of relevant stakeholders

2.1.1. Reasons for identification of stakeholders^[1]

Identification and classification of the sphere of influence of an organisation is one of the key-steps of a sustainability approach. To be sustainable an organisation needs to identify actual and new potential targets for its actions and decisions.

The objectives of listing and prioritising stakeholders are:

- Identify stakeholders of the organisation and analyse their characteristics and priorities
- Prioritise organisation's stakeholders to allow appropriate revision and adapt communication procedures accordingly
- Rebalance organisation' relationships with various stakeholders
- In relation to the areas for action or actions identified, identify stakeholders that would be concerned or impacted by them so as to adapt actions and strategy

2.1.2. Spheres of identification of stakeholders

The following seven main groups of stakeholders can be considered:

1. Within the organisation
2. In the value chain of the organisation
3. Public authorities, public services, media
4. Professional organisations of the vitivinicultural sector

5. Social sphere
6. Environmental sphere
7. Economic sphere

2.1.3. Potential stakeholders

The following list provides an indicative outline of possible stakeholders of an organisation of the vitivinicultural sector. It should be noted that one stakeholder can be classified in one or more categories, as his relationship with the organisation can concern various aspects of the organisation's activities.

1. Within the organisation

- Employees
- Management team
- Seasonal workers
- Subsidiaries
- Governance: shareholders, investors, cooperative members, associates, etc...
- Employees associations

2. In the value chain of the organisation

- Clients
- Suppliers and service providers
- Consumers and final users
- Partners and competitors on the same market

3. Public authorities, public services, media

- Public authorities
- Research and education institutions

- Media
- Newspapers and magazines
- Wine-writers and b(v)loggers
- Editors (wine guides, touristic guides, etc...)
- Scientific publishers

4. Sector bodies of the vitivinicultural sector

- Professional and interprofessional organisations of the vitivinicultural sector including certification bodies of organisations
- Competitors
- Environmental organisations
- Social responsibility and sustainability organisations (SRO's)
- Local community organisations (culture, sport, religion, etc...)
- Tourism organisations and agencies
- Intergovernmental and international organizations (such as OIV)

5. Society in general

- Neighbours
- Recruitment (agencies, educational institutions, etc...)
- Security and health
- Organizations for social inclusion and integration
- Vulnerable groups (associations, organisations)
- Future generations (associations)
- Training and educational private organisations and associations

2.1.4. Methodology of prioritisation of stakeholders

Step 1: make the list of the organisation's stakeholders

Step 2: validate the list of stakeholders (discussion within the organisation, validation by a relevant group)

Step 3 prioritise organisation's stakeholders

- Associate a level of priority or of mutual influence to each stakeholder (choose a notation scale: for example from 1 to 5)
- The level of priority should be validated by discussion within the group responsible for the task

Step 4: For each stakeholder describe the actual level of relation, level of mutual influence, expectations, risks and associated area for action

Stakeholder	Level of mutual influence	Expectations	Opportunities	Risks	Associated principle of sustainability	Associated area for action

Step 5: organise stakeholders by level of priority and level of mutual influence (table or cartography)

2.2. Identification and prioritisation of relevant areas of actions

Not all areas for action are suitable for all types of organizations. For example, an organisation not planting new plots or constructing new structures cannot be evaluated according to its options on site selection.

Step 1: identification of potential actions

The OIV resolution OIV-CST 518-2016 defines 16 areas for action. The current guide provides recommendations for activities that can be undertaken in each of the mentioned areas for action (part 3).

The organization should identify and list potential actions in all the 16 areas for actions, except for those that are clearly inapplicable.

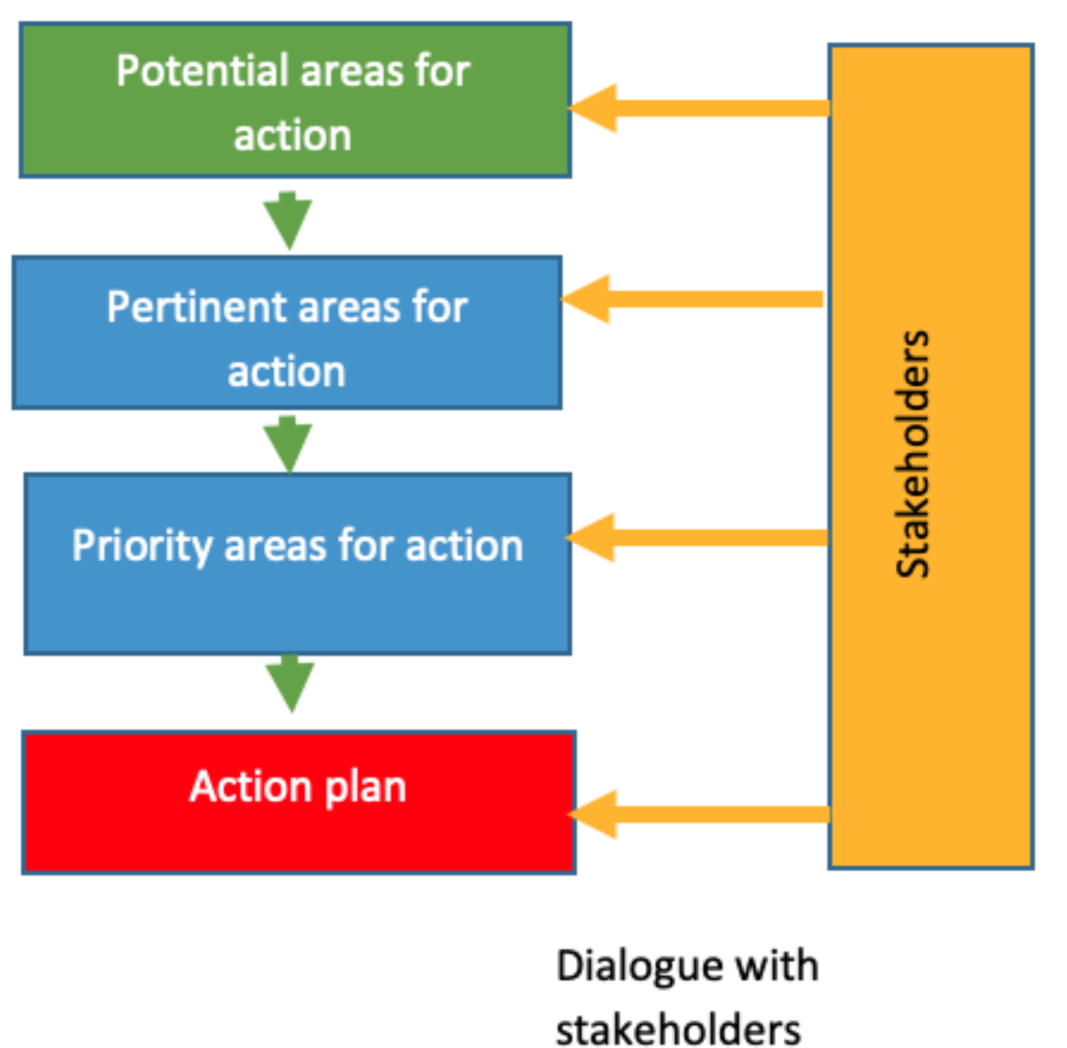
Step 2: identification of pertinent actions

For each action listed in the previous phase, the organisation allocates a level of priority (example: 1 for strategically important, 4 for low importance, 0 for not

applicable).

The following criteria can be used:

- Potential impact of decisions and activities on the stakeholders, environment, organisation's commitment to sustainability and organisation's activity
- Level of implication of stakeholders
- Feasibility of action



Step 3: classification and prioritisation of actions

Organisation decides to retain the most pertinent and applicable actions. Special attention is made to keep actions in all of the 5 principles of sustainability, as defined by the resolution OIV-CST 518-2016.

Stakeholders supposed to be affected by the action are identified.

The following table can be used as an example of the decision-making process:

Area for action	Action identified	Level of priority	Stakeholders involved
Principle 1: Sustainable approach integrates environmental, social and economic aspects			
Area for action 1.1 Governance of the organization	Participation of management team in training on sustainability	1	Management team
	Drafting of sustainable production strategic plan	1	Management team
	Identification of relevant stakeholders	1	Management team, employees
	Overview and analysis of existing regulations	2	Legal department
	Analysis of positive and negative impacts of the organisation's activities	1	Operational department
	Definition of procedures for operation of sustainability approach within the organisation	1	Management team
Principle 2: Sustainable vitiviniculture respects the environment			

Area for action 2.1: Selection of the site	Not applicable for the moment, no projects of growing	5	N/A
Area for action 2.2: Soil management	Minimise risk of erosion	2	Agricultural team Management team Research institutions Environmental associations

The table as developed should then be crosschecked with the table obtained in step 4 of identification of relevant stakeholders' procedure (point 2.1.4).

Step 4: drafting of strategic plan

In order to finalise prioritisation and draft initial strategic plan, each area for actions should be evaluated under two parameters:

- Importance of the area for action
- Actual performance of the organisation in the area for actions

The following table demonstrates an example:

Identified areas for action and related actions	Importance of the action	Actual performance of the organisation
1.1 Governance of the organisation	1 (high)	(low)
2.5 input management - rationalisation of energy use	1 (high)	2
2.5 input management - rationalisation of water use	1 (high)	5

2.5 input management - optimising the use of technical inputs during the production and processing phases	1 (high)	3
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This step allows identification of the existing commitment of the organisation to sustainability approach, as well as points where additional progress and development are needed.

Strategic plan of actions should consider these findings of the previous analysis.

3. Part 3: Implementation of a sustainability approach by an organisation of the vitivinicultural sector

3.1. General principles of sustainability adopted by the OIV resolution OIV-CST 518-2016 and the related fields of action

The OIV resolution OIV-CST 518-2016 is organised around five principles of sustainability. All of them should be respected while organising and implementing a sustainability program. Each principle can be divided into several areas for action.

OIV-CST 518-2016: General Principles of Sustainability applied to Vitiviniculture

Principle 1: Sustainable approach integrates environmental, social and economic aspects	
Area for action 1.1	Adjustment of the governance of the organisation
Area for action 1.2	Control and communication of sustainability performance
Principle 2: Sustainable vitiviniculture respects the environment	
Area for action 2.1	Selection of the vineyard and winery site
Area for action 2.2	Soil management
Area for action 2.3	Preserving biodiversity
Area for action 2.4	Preserving the landscape

Area for action 2.5	Input management
Area for action 2.6	Output management
Area for action 2.7	Limiting noise and air pollution
Area for action 2.8	Adaptation to climate change and mitigation of climate change
Principle 3: Sustainable vitiviniculture is sensitive to social and cultural aspects	
Area for action 3.1	Working conditions
Area for action 3.2	Integration with the local socio-economic and cultural environment
Area for action 3.3	Health and safety of consumers
Principle 4: Sustainable vitiviniculture seeks to maintain economic viability	
Area for action 4.1	Resilience
Area for action 4.2	Efficiency
Principle 5: Sustainable initiatives require planning and assessment	
Area for action 5.1	Planning
Area for action 5.2	Assessment/self-assessment
Area for action 5.3	Monitoring and development of knowledge
Area for action 5.4	Communication

With reference to the five principles of sustainability, defined by resolution OIV-CST 518-2016, this document intends to:

- Define a general framework for strategy definition, planning, management and evaluation of sustainable initiative of the organisation
- Propose possible areas for action

- Propose a tool to help in planning and organisation of actions, including the prioritisation of these actions according to the objectives established by the organisation and within its particular environmental, social, cultural and economic or market situation/context
- Propose a tool to facilitate the identification of stakeholders^[2],
- Propose a tool to help in performance evaluation, i.e. a list of **possible indicators** for each principle and area for action,
- Propose for each area for action, suggestions for **good practices** that may be implemented within the organisation.

3.2. Development of a sustainability strategy within an organisation

Sustainability should not be limited to compliance with static requirements. It is about innovation, value creation and value capturing; it requires that business models be critically assessed and changed to more efficiently address the multiple and continuous ongoing challenges of sustainability.

While developing sustainability strategy, a broad and/or global vision of the organisation should be defined to meet such challenges. Vitivinicultural products should not be seen only as product but as an experience, thus rethinking the offer and the value chain.

Several considerations before launching sustainability strategy discussion within an organisation:

- **Don't start from the present - better to start from the future.** Be forward thinking. Starting from the present will make you compliant with the actual situation. Starting from the future will make you proactive.
- **Ensure that research, analysis and learning precedes investments and changes:** investment and/or change will be useless without a clear understanding of how to use them. Smart organisation start small, learn fast and scale rapidly.
- **Stay wedded to the goal while constantly adjusting strategy:** smart executives and organisations accept that they will have to make many strategic adjustments along the way. Although directional consistency is important, strategic flexibility is critical.
- **Build collaborative capacity:** in the actual world, creating alliances with other

businesses, nongovernmental organisations and governments is one of the major keys to success – it can foster innovation, optimise research and development costs, develop new ideas for diversification. Success often depends on the organisation's ability to create new structures, operating roles and procedures, and mechanisms for developing products, distributing them, and sharing value among different actors of the value chain.

The process of introduction and implementation of sustainability approach by an organisation includes six steps:

- **Step 1:** Understand the sustainability concept and the current guide
- **Step 2:** Make an initial evaluation of the sustainability situation within the organisation and if possible, conduct benchmarking with other similar organisations
- **Step 3:** Identify and hierarchize stakeholders
- **Step 4:** Identify and hierarchize areas for action
- **Step 5:** Link the areas for action with the stakeholders
- **Step 6:** Plan, do, check, adjust

3.2.1. Understand the sustainability concept and the current guide

The management of the organisation must become familiar with the structure of the document, its recommendations and its vocabulary.

The implications to the organisation of the implementation of sustainability approach should be evaluated and understood: objectives, costs, benefits, additional human resources and expertise and partnerships. Each of these aspects will assist in securing both the internal and external support and the leaders/project champions that are critical for the effective establishment of this (ese) program (me)s.

3.2.2. Make an initial evaluation of the sustainability situation within the organisation and if possible, conduct benchmarking with other similar organisations

Before launching a sustainability approach, it is strongly advised to evaluate the current situation of the organisation and to compare it to the situation of other organisations of the region and/or sector.

This can be achieved by participation in relevant seminars, events, training sessions,

by contact with organisations already implementing sustainability approach or providing guidance/references

Internal inventory and/or mapping can be made by an external service provider or can be done internally based on findings of self-evaluation.

3.2.3. Identify and hierarchize stakeholders

Impacts, interests and expectations

In addressing sustainability strategy an organisation should consider the following relationships:

- **Between the organisation and society:** how organisations' decisions and activities impact on society and the environment. An organisation should also understand society's expectations of responsible behaviour concerning these impacts.
- **Between the organisation and its stakeholders:** an organisation should be aware of the interests and attitudes of its various stakeholders. These are organisations or individuals whose interests could be affected by the decisions and activities of the organisation
- **Between the stakeholders and society:** an organisation should understand the relationship between the stakeholders' interests that are affected by the organisation, on the one hand, and the expectations of the society on the other. Although stakeholders are part of society, they may have an interest that is not consistent with the expectations of society.

Understanding and identification of the sphere of influence of the organisation

Stakeholders are organisations or individuals that have one or more interests in any decision or activity of an organisation. Because these interests can be affected by the organisation, a relationship between them is created. This relationship needs not be formal; the relationship created by this interest exists whether or not the parties are aware of it.

To identify stakeholders an organisation should ask itself the following questions:

- To whom does the organisation have legal or ethical obligations?
- Who might be positively or negatively affected by the organisation's decisions or activities?

- Who is likely to express concerns about the decisions and activities of the organisation?
- Who has been involved in the past when similar concerns needed to be addressed?
- Who can help the organisation address specific impacts?
- Who can affect the organisation's ability to meet its responsibility?
- Who would be disadvantaged if excluded from the engagement?
- Who in the value chain is affected?

After the identification of relevant stakeholders of an organisation, an analysis should be conducted to assess how the interests of those stakeholders should be addressed. This analysis will help to establish a hierarchy of demands of stakeholders and a clear mapping of possible interactions with stakeholders and society. It may be particularly interesting to assess those stakeholders who have high influence but low interest in the project or organisation.

The part 2.1 of this document proposes a more detailed methodological outline of identification and analysis of stakeholders

3.2.4. Identify and hierarchize areas for action

A detailed description of sustainability principles, areas for action and major issues as applied to the vitivinicultural sector is presented in point 3.3. of this guide. This part of the document also provides non-exhaustive selection of examples of actions to be undertaken for each of the areas of actions covered by sustainability principles.

The final selection of examples to apply or the generation of innovative, issues-specific approaches should be guided by the priorities, resources and context of each organisation.

All five sustainability principles should be considered when making decisions or choosing actions.

An illustration of hierarchization of identified areas for action is presented in point 2.2.

3.2.5. Identify measurable goals and appropriate indicators for chosen areas for action:

A set of goals and indicators should be identified for each identified area for action. Goals following the SMART methodology criteria should be:

- **Specific:** a specific area for improvement should be target

- Measurable: an indicator of progress should be quantified or at least suggested
- Assignable: the person/department responsible should be identified
- Realistic: objectives can realistically be achieved, given available resources
- Time-related: time frame when the result(s) can be achieved should be indicated.

The indicators should be at least:

- Relevant
 - Linked to the target: The indicator should be clearly linked to one or more targets and provide robust measures of progress towards the target(s).
 - Relevant to the operational context.
- Useful: The measurement well-captures program effectiveness.
- Credible
 - The indicator is reliable and sensitive
 - There should be a detailed description of the method of measurement
 - Based on sound methodology: the indicator should be scientifically robust and based, to the greatest extent possible, on existing internationally agreed definitions, classifications, standards, recommendations and best practices. The methodology behind the indicator (data sources, method of computation, treatment of missing values, regional estimates, etc.) should be well documented and readily available
 - Have been tested: empirical analysis showing the indicator is valuable has been undertaken and results have been documented. The indicator should be recommended by a well-established and recognized peer review mechanism or through international mechanisms. For new indicators, pilot projects are needed and must be supported with necessary resources to test the indicators and data collection methods and the results need to be fully documented.
- Feasible: the indicator should be measured in a cost-effective and practical manner. A regular and timely data collection mechanism has been or can be developed with reasonable costs and effort.

- Easy to communicate. The indicator is clear and easy to understand for policy makers, the general public and stakeholders, and unambiguous for interpreting.

3.2.6. Link the areas for action with the stakeholders

For each identified area for action, the organisation should associate relevant stakeholders.

3.2.7. Assessment report

An assessment report should be drafted including the following elements:

- Results of the analysis of identified stakeholders
- Hierarchised areas for actions linked with identified stakeholders
- Sustainability goals of the organisation and their time-frame of implementation (short term and long term)
- Indicators for monitoring sustainability goals

3.2.8. Plan, do, check, adjust

PDCA (plan, do, check, adjust) approach is recommended. This approach allows to constantly adapt the strategy to the real-world conditions.

3.2.9. Report on sustainability

An organisation should report at appropriate levels about its performance on sustainability to the stakeholders affected.

In reporting to its stakeholders, an organisation should include information on its objectives, indicators chosen to measure the performance and performance in the core issues of sustainability. Units used to present numeric values should be harmonised with the International System of Unit (SI). Fair and complete picture of performance in the implementation of sustainability strategy, including achievements and shortfalls and the ways in which the shortfalls will be addressed.

The form of the report should be adapted to the target group (it could be a detailed report, letters, graphics communication illustrating quantitative performance, etc...)

3.3. Action areas and recommendations for the application of the 5 principles of sustainability in vitiviniculture

There is no exhaustive list of actions that an organisation must undertake to be sustainable. On the contrary, once an initial plan has been put in place, the process is constantly improved by researching best practices and introducing them into the organisation's activities if appropriate. The organisation should apply the PDCA management model (plan, do, check, adjust).

This part of the document, with the aim to support vitivinicultural organisations in implementing the five principles of sustainability, proposes some general and operational indications.

For each of the five principles the main challenges for vitivinicultural organisations and the specific roles that sectoral bodies may play to support progresses toward sustainability are indicated.

In operational terms, as the resolution OIV-CST 518-2016 – “General Principles of Sustainability applied to Vitiviniculture” defines for each Principle a number of areas of actions (see point 3.1 of this document), this part of the document proposes:

- Indicators to evaluate the fulfilment of targets associated with each area of action;
- Actions to develop inside each area of actions; each proposed action is presented with a list not exhaustive of recommendations referring to an effective implementation
- Main challenges for a vitivinicultural organisation
- The role of sectoral bodies.

Consistently with what was previously stated, vitivinicultural organisations may carry out other actions, additional or alternative to those proposed by this document, according to their specific conditions.

Principle 1: Sustainable approach integrates environmental, social and economic aspects

The OIV resolution OIV-CST 518-2016 states that a balanced and simultaneous consideration of environmental, social and economic aspects of sustainability is necessary. It is crucial that organisations assume a holistic attitude to integrate all

these three aspects of sustainability into their management approach. Balance in the integration of the principles of sustainability should be respected.

Main challenges for a vitivinicultural organisation under principle 1:

- to elaborate and adopt a global sustainability strategy at the organisation accounting level for the needs and specificities of the given organisation;
- to be part of a collective sustainability strategy aiming to increase efficiency in the achievement of sustainability goals set up collectively;
- to create sustainable business models to increase the value created and to secure its cost effectiveness.

Role of sectoral bodies

Collective organisation of the vitivinicultural sector should facilitate the dissemination of a holistic management culture and stimulate the development of local networks committed to sustainability objectives.

Proposed actions that can be undertaken by the organization in implementing Principle 1

Area for action 1.1	Adjustment of the governance of the organisation <i>Recommended indicators:</i> percentage (%) of actions undertaken per each pillar of sustainability
Proposed action 1.1.1	Overview and analysis of existing regulations

Recommendations	<p>Establish regulatory monitoring procedures adapted and appropriate to the activities, scale, risk and complexity of the organisation. The following aspects should be monitored with special care (non-exhaustive list):</p> <ul style="list-style-type: none"> • security and health at work; • human resources management; • environmental aspects; • security and health of consumers; • origin and genuineness of the products, • trade issues; • information to consumers; • international norms of behaviour (generally accepted principles of international law, intergovernmental agreements that are universally or nearly universally recognised); • available alternative sources of financing compared to those already available <p>Under this action, considerable assistance can be provided by sectoral bodies operating in the sector</p>
Proposed action 1.1.2	Integration of sustainable production approaches within the governance structure of the organisation
Recommendations	<ul style="list-style-type: none"> • A written commitment of the organisation to sustainability communicated to the management team and employees • Provision of specific training on sustainability issues to the management team • Encourage participation of staff at all levels of management structure in the definition and achievement of sustainability goals and cooperation with appropriate outside organisations • Establish a system for assigning responsibilities and resources in terms of business sustainability
Area for action 1.2	Control and communication of sustainability performance
Proposed action 1.2.1.	Analysis of positive and negative impacts of the organisation's activities and interactions within the three pillars of sustainability

Recommendations	<p>Establish specific evaluation procedures. The following areas of influence should be considered with special attention:</p> <ul style="list-style-type: none"> • regulatory and normative compliance • security and health aspects of products • satisfaction of clients and consumers • safety and security conditions at work • environmental impacts (for example carbon footprint, water footprint, biodiversity) , • social and territorial impact (in relation to all relevant stakeholders and to the territory) • compliance with international norms of behaviour • economic impact <p><i>Environmental, Social and Economic aspects should be taken into consideration while conducting the analysis of organisation's impacts</i></p>
Proposed action 1.2.2	Integrate organisation's impact on sustainability in strategic business decision making
Recommendations	<ul style="list-style-type: none"> • Decision-making on new investments and processes must take into account sustainability processes. • Implement a code of ethical conduct that includes issues such as corruption prevention, conflict of interest and / or anti-competitive practices. • Periodically publish evaluation reports on the organisation's environmental, social and economic performance. • Develop corrective measures in cases where the organization is responsible for a negative social or environmental event. Prepare a report on each of these events. • Facilitate access to your agents of interest to information about their practices, decisions and policies.

Principle 2: Sustainable vitiviniculture respects the environment

The protection of soils, water, air, biodiversity and landscapes is particularly relevant in the vitivinicultural field. Therefore, a sound planning is required before planting new vineyards or establishing other vitivinicultural facilities, using well-established ecological principles and the optimum management of existing and new assets.

For this principle of sustainability, the importance of collective strategies and initiatives needs to be particularly underlined. To be most effective environmental

solutions should be endorsed by all stakeholders.

Main challenges for a vitivinicultural organisation under principle 2:

- **to demonstrate the positive role** of the vitivinicultural sector toward the environment and ecosystems;
- **to preserve the sustainability of the vineyard** as a productive entity or unit;
- **to consider the environmental impact as a whole, taking into consideration all types of possible environmental impacts and their interactions and competition;**
- **to guarantee efficient and limited** use of natural resources as well as their conservation;
- **to prevent** environmental risks arising from vitivinicultural operations;
- **to have an active role in sustainable production and consumption**, contributing to the promotion of sustainable production among suppliers and sustainable consumption among consumers and buyers;
- **to promote the** use of environmental best-practices and the integration of related innovations in the vitivinicultural sector, including recent scientific findings in agroecology.

Role of sectoral bodies

Collective organisation of the vitivinicultural sector has the capacity to be a catalyst for the acceptance of an innovative production practice as an admitted environmentally friendly production solution.

Collective organisations of the sector should facilitate the acceptance and implementation of environmental measures, especially by undertaking the following activities:

- identification of priority issues and actions that are most suitable for local conditions aiming at limiting environmental impacts
- facilitation of acceptance of these actions by the local authorities (example: facilitate the process of integration of new practices in products' specifications (geographical indications, Appellations of origin, collective marks, etc....))
- promotion of the implementation of new environmental practices among

producers

- evaluation and valorisation of the implementation of environmental practices among local stakeholders (local authorities, tourism professionals, residents, consumers, etc...);
- awareness raising activities about environment-friendly practices Coordination at the local and national level of promotion activities concerning the implementation of new environmental practices.

Proposed actions that can be undertaken by the organization in implementing Principle 2

Principle 2: Sustainable vitiviniculture respects the environment	
Area for action 2.1	<p>Selection of the site</p> <p><i>Recommended indicators:</i></p> <p>1. Soil analysis:</p> <ul style="list-style-type: none"> • Number and locations of soil samples to cover site diversity and different soil profiles • Number of samples on soil biologic problems such as nematodes • Soil physio-chemical analysis including macronutrients, micronutrients, pH, organic matter • Number of biodiversity hotspots identified • microbial load responsible for grapevine diseases <p>2. Structure and territory</p> <ul style="list-style-type: none"> • Number of neighbouring communities identified • Number and closeness of water bodies identified • Due Diligence study to assess of site suitability
Proposed action 2.1.1	The organisation identifies possible sites for installation of new viticultural plots (if applicable)

Recommendations	<p>For each site, a study is conducted on its suitability to the chosen production. The following parameters should be taken into consideration (non-exhaustive list):</p> <ul style="list-style-type: none"> • proximity to sensitive areas • proximity to protected and urban areas • accessibility • distance to winery • available water resources • soil characteristics and profile (texture, type, soil depth, etc....) • orientation and topographic characteristics: gradient of the slope, the necessity of special treatment for erosion prevention (row orientation, terraces, green-cover, stone walls, etc...) and any other site improvements (soil amendments, wind-breaks, attenuation of frost risks, etc.) • altitude • air and soil temperature • precipitations • cold hours during winter or dormant period[3] • dominant exposition and row orientation <p>The final decision regarding the choice of site of installation is justified according to the conclusions of the study</p>
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Proposed action 2.1.2	The organisation identifies possible sites for the installation of new infrastructure and buildings (if applicable)
Recommendations	<p>For each site, a study is conducted on its suitability for the chosen production according to the following parameters (non-exhaustive list):</p> <ul style="list-style-type: none"> • proximity to sensitive areas • proximity to protected and urban areas • proximity of water sources • accessibility by transport • distance to already existing vineyards • natural resources (water, soil, etc.) <p>The final decision regarding the choice of site of installation is justified according to the conclusions of the study</p>
Proposed action 2.1.3	Wineries and vitivinicultural facilities for production needs of fresh grapes, raisin, grape juices, wine, distillation, etc... follow principles of eco-conception

Recommendations	<p>The following recommendations for better environmental efficiency should be followed and respected:</p> <ul style="list-style-type: none"> • Integrate concepts of sustainable development and eco-construction for building, equipment and operations. • Follow a bioclimatic approach using presently accumulated know-how while anticipating future needs. • Design operations to reduce energy and water needs while enhancing quality of products. • Implement operational eco-management for waste and wastewater. • Create a comfortable, safe and healthy environment for workers and visitors. • Ensure easy and inclusive access to all premises. • Where possible, preserve and/or establish landscape biodiversity areas to enhance local vine-growing and natural characteristics.
Area for action 2.2	<p>Soil management</p> <p><i>Recommended indicators:</i></p> <ul style="list-style-type: none"> • % of Organic content in the soil • % of surfaces eroded • % of surface under winter vegetal cover • Indicators on soil biodiversity (ex. Biological quality of Soils, microbiological analysis, etc...) • Consider the specific conditions of the vineyard. E.g. for steep slope vineyards consider the quantification of dry stone walls, because of their mitigation effect on erosion
Proposed action 2.2.1	The organisation minimises the risk of erosion, loss of soil biodiversity and loss of nutrients in the soil and enhances, if required, soil's organic matter content
Recommendations	<p>Examples of possible actions:</p> <ul style="list-style-type: none"> • limit soil levelling interventions in hilly areas • Adapted green cover (use of local plant species, adapted periods, etc...) • Use of ecological infrastructures (stones, walls, etc...), in adequacy with regional landscapes • Rationalisation of machinery use • Use of adapted irrigation systems (micro or drip, Regulated Deficit Irrigation (RDI) or Partial root drying (PRD)) • Integration of landscape elements
Proposed action 2.2.2	The organisation maintains fertility, biodiversity and structure of the soil
Recommendations	<ul style="list-style-type: none"> • Examples of possible actions: • Sustainable weed control • Adaptation of the vegetal cover strategy. Appropriately adapted sward species (grasses, broadleaved plants or mix thereof) • sustainable use of herbicides for reducing their impacts • use of biocontrol or physical control (fire, electricity, cuts, and other), mulch and green fertilization • Protect and improve soil organic matter and water retention capacity (where applicable) • Implement sustainable fertilization plan with best practices based on scientific assessment that defines the quantities and methods of administration of the main fertilizing elements - based on parameters such as visual analysis of the vegetative-productive state of the vineyard, soil analysis, leaf analysis, etc. • Adapted pest and disease management: reasoned use of plant protection products • Improvement of integrated management for the containment of harmful organisms; favor the action of natural antagonists use of biocontrol agents whenever adequate. • Rationalisation of machinery use and limitation of soil compaction • Fallow period in case of replanting
Proposed action 2.2.3	The organisation considers and minimises the impact on soils and landscapes in the phases of restructuring of plots and earth movements
Proposed action 2.2.4	The organisation minimises soil and water sources contamination by plant protection products

Recommendations	<ul style="list-style-type: none"> • Increase surface under green cover • While applying plant protection products take into account the following parameters[4] : <ul style="list-style-type: none"> - Phenological stages and leaf area development - Machinery technical parameters - Training and trellising system - Visible water runoff - Soil porosity - Adequate doses for an optimal application depending on the vegetative development of vines, specificity of the product and ways of employment - Climate, plant and soil conditions and characteristics - Diseases/pest species, infestation or infection pressure, damage and intervention thresholds - Forecasting models, monitoring or field observations • Modernise techniques of application of plant protection products (variable rate, sprayers types, maintenance and calibration, certifications, etc...) • Use of recovering panels during the application of plant protection products. • Establish an action protocol for management of soil and surface water contamination incidents by plant protection products in facilities and agricultural land and also in compliance with the rules set out in the labels of the plant protection products.
Area for action 2.3	Preserving biodiversity ^[5] (including soil biodiversity) <i>Recommended indicators:</i> <ul style="list-style-type: none"> • % of surface of ecological interest (terraces, stone walls, groves of trees, hedges, buffer zones near watercourses, etc...) • Number of species protected by specific actions of the organisation • Number of varieties and genotypes in use
Proposed action 2.3.1	Evaluation of biodiversity on site
Recommendations	<ul style="list-style-type: none"> • Survey of sensitive and protected species of flora and fauna situated in the proximity of its site (through local associations, authorities, scientific institutions, etc.) • Keep an inventory of the habitats/ecological niches present on its sites and their evolution from year to year.
Proposed action 2.3.2	Follow up on the impact of the organisation's activities on biodiversity
Recommendation	<ul style="list-style-type: none"> • Keep a record of documents (mapping and lists of actions to carry out) for actions to preserve remarkable biodiversity identified on its land (if applicable).
Proposed action 2.3.3	Apply methods and practices that make it possible to preserve, regenerate and expand where appropriate, ordinary functional biodiversity as well as remarkable and protected biodiversity present on its sites
Recommendations	<ul style="list-style-type: none"> • Develop actions that help to reduce the use of pesticides on its holding (integrated pest management and integrated production methods are recommended). • Introduction of alternative plant-protection methods or integrated pest management (e.g. false-trail-following technics, trap and decoy crops, sexual confusion, etc...) • Establishment of hedges or blooming fallows with local species • Reasoned management of interstitial spaces (e.g. reasoned mowing of slopes and borders of vineyards, limited size of hedges, elimination of non-native and invasive species ...)
Proposed action 2.3.4	Raising awareness regarding the importance of preservation and development of biodiversity

Recommendations	<ul style="list-style-type: none"> • Raise awareness among employees and organisations within its direct sphere of influence on biodiversity preservation and development of auxiliary fauna and the importance of ecological continuity • Raise awareness of tourists and local population about the biodiversity of the site and its preservation: <ul style="list-style-type: none"> - Installation of explanatory panels to inform the visitors of the region of the endemic flora and fauna - conduct educational events on biodiversity preservation in schools, local organisations, etc... - <i>Collective organisations should promote actions to support producers for an adequate management of biodiversity</i>
Proposed action 2.3.5	The organisation considers, preserves and enlarges (where applicable) varietal and clonal diversity of vines
Recommendations	<ul style="list-style-type: none"> • Enhance autochthonous vine varieties and types of products that have shown over time to be best suited to the territory • Consider use of new varieties (also resistant to biotic and abiotic stress), where applicable
Area for action 2.4	<p>Preserving the landscape</p> <p><i>Recommended indicators:</i></p> <ul style="list-style-type: none"> • Definition of types/categories of landscapes and their ecological value • Number and proportion (%) of different types of landscapes in the area considered • % quantification according to the ecological value of each category of ecological infrastructures ().
Proposed action 2.4.1.	The organisation undertakes necessary actions to preserve the landscape, whenever possible striving to increase its value for other activities (nature preservation, tourism, ecosystem services, etc.)
Recommendations	<ul style="list-style-type: none"> • An assessment is made of the impact on the landscape during the phases of development, planting, restructuring or grubbing up of vineyards and on the installation and architecture of processing or operating facilities. • Landscape features to be safeguarded are identified. • If applicable, coordination in the frameworks of regional programmes with a view to the preservation and development of landscapes should be considered. • Production processes are adapted whenever possible in respect of values derived from the previously existing natural landscape's biodiversity and its public amenity value.
Area for action 2.5	<p>Input management</p> <p><i>Recommended indicators:</i></p> <ul style="list-style-type: none"> • Quantity of water consumed (total and by unit of production) • Quantity of energy consumed (total and by unit of production) • Quantity of phytosanitary products consumed by type (total and by unit of production)[6] • % energy consumed from renewable sources • Inputs for winery (oenological products, packaging material, etc....)
Proposed action 2.5.1.	Rationalisation of energy and water use

Recommendations	<p>Identification</p> <ul style="list-style-type: none"> • The organisation knows its energy and water consumption (total quantity, quantity by unit of production, type of energy source), as well as the main sites of consumption. • The organisation seeks to identify the most efficient solutions to reduce energy and water consumption. • Technical and economic feasibility studies are made for the introduction of energy efficient production facilities and use of renewable energy sources: wind turbines, photovoltaic panels, biomass-energy installations, etc. • The organisation identifies relevant stakeholders concerned by and sharing the same watershed. <p>Rationalisation</p> <ul style="list-style-type: none"> • Necessary adjustments and investments are made to optimise and reduce energy consumption. Use of renewable sources of energy is favoured. • Necessary adjustments and investments are made to optimise and reduce water consumption. <ul style="list-style-type: none"> - Optimization of canopy management according to natural resources (water, sun exposition or radiation, soil, etc.) for a good balance of the vineyard. - Use of meteorological data (i.e. to calculate crop evapotranspiration - ETc) to estimate and optimize the grapevine water consumption. - Optimisation of water use in the winery. • Collective measures are taken with other organisations of the same watershed so as to preserve access to water resources, avoid pollution and to ensure sustainable water management.
Proposed action 2.5.2	Recommended options for vineyard management
Recommendations	<ul style="list-style-type: none"> • The organisation lists and monitors the use of raw materials and inputs • The use of high-precision machinery allowing for high precision applications • Products with limited health impact are privileged • The organisation optimises the harvest according to its objectives (harvest by area; manual vs. mechanical harvester; zoning harvesting, etc.) and winery resources (e.g. fermentation tanks) • Pruning training and canopy management is made according to available natural resources (water, sun exposition or radiation, soil, specificities of the vineyard, etc.) and human resources for a good balance of the vineyard. The following indicators can be used for the evaluation of vineyard condition: <ul style="list-style-type: none"> - Vigor/yield ratios - number of shoots per vine; - Number of clusters per vine; - Vegetative and Reproductive Yield (kg/plant); - Ravaz index, etc. • The organization considers new technological opportunities that allow for the reduction of the use of inputs and the recycling of waste and by-products
Proposed action 2.5.3	Recommended management options for harvesting, winemaking and bottling

Recommendations	<p>The organisation defines detailed “Processing protocols” at least for the above-mentioned activities if carried out. “Processing protocols” should specify at least the following:</p> <ul style="list-style-type: none"> Operational conditions for the harvest of grapes and choice of purchased grapes based on chemical-physical and/or sensory parameters aimed at defining the technological, phenolic and/or aromatic ripeness and taking into account the “residual” characteristics of the grapes; operational conditions and criteria for choosing the pre-fermentation treatments carried out; if applicable, operational conditions and criteria for choosing the drying methods used; operational conditions and criteria for choosing the mashing operations performed on each “production batch”; management criteria for corrections and nutritional integration for musts that shall refer to documented analytic assessments; operational conditions and criteria for choosing the alcoholic fermentation/maceration performed on each “production batch” documented and supported by chemical-physical and sensory parameters; operational conditions and criteria for choosing the malolactic fermentation performed on each “production batch” documented and supported by chemical-physical and sensory parameters; operational conditions and criteria for choosing the assembly of the mass made on each “production batch” documented and supported by chemical-physical and sensory parameters; operational conditions and criteria for choosing the tartaric and protein stabilisation and conservation of the wine performed on each “production batch” documented and supported by chemical-physical and sensory parameters; operational conditions and criteria for choosing the pre-bottling operations performed on each “production batch” documented and supported by chemical-physical and sensory parameters; operational conditions and criteria for choosing the bottling operations for the various products that define the operational conditions documented and supported by chemical-physical and sensory parameters; operational conditions and criteria for choosing the cleaning operations for the different bottles or other containers used and process control methods; Establish measures for the reuse and recycling of waste in the organisation itself. <p>At least once a year, the organisation conducts a general review of the processing protocols and the winery records to identify the operational methods that, while guaranteeing the same product quality requirements, minimise water and/or energy consumption and/or the use of processing aids, additives and nutrients;</p> <p>Recommended considerations for management of packaging</p> <p>The organisation defines the criteria by which a type of packaging is used/re-used, considering its ability to maintain the quality of the product over time based on its intended use and sales channels and recyclability or other indicators of eco-design. At least once a year, the organisation verifies the choices made regarding the use and re-use of the packaging types, with a view to identify those that minimise the water and/or energy consumption based on objective criteria, which may be of the same type or another type considered compatible.</p> <p>Recommended considerations for storage of finished product</p> <p>The organisation stores the packaged product using conditions that minimise water and/or energy consumption, while guaranteeing the conservation of the product’s quality standards.</p> <p>Recommended considerations for cleaning and sanitation of rooms and equipment</p> <p>The organisation defines operational conditions and criteria behind the validated^[7] cleaning and sanitation plans. The organisation chooses and documents technical-operational solutions from those that will minimise consumption of water and/or energy and/or detergents and sanitising products.</p> <p>At least once a year, the organisation verifies the sanitation plan, to identify possible new technical-operational methods that, while guaranteeing the same quality standards, minimise the consumption of water and/or energy and/or detergents and sanitising products.</p>
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Area for action 2.6	Output management ^[8] <i>Recommended indicators:</i> <ul style="list-style-type: none"> • Total quantity of waste Including wastewater • % of recycled waste and recycled wastewater • % composted organic waste • Valorised by-products: <ul style="list-style-type: none"> - Quantity - value
Proposed action 2.6.1	Optimisation of waste management
Recommendation	<p>Identification</p> <ul style="list-style-type: none"> • The organisation ensures regular follow-up of waste production by type, quantity of waste produced and by type of treatment. • All sources of hazardous waste (phytosanitary products, machine oil, plastic used in vineyards, etc.) are identified. <p>Reduction/optimisation</p> <ul style="list-style-type: none"> • In the elaboration of waste reduction plan the organisation pursues the following strategy: <ul style="list-style-type: none"> - Source reduction - Reuse - Recycling - Reprocessing • While communicating with suppliers, environmental criteria, and waste reduction strategies should be progressively integrated into technical specifications of goods to be purchased. • While developing/adapting new products, the future recyclability of its packaging is considered. • Promotion of recycling (consumers and employees). • The organisation takes all necessary provisions to ensure treatment or pre-treatment of wastewater. • All necessary efforts are made to ensure appropriate storage conditions for hazardous waste to limit all risks of pollution and for human health. • Promotion campaigns near workers/growers/wineries to reduce the use of plastic in vineyards / implementation of recycling strategy of plastic.
Proposed action 2.6.2	Valorisation of by-products
Recommendations	<p>In order to limit waste quantity, valorisation/value-adding of by-products of the organisation can be considered. Examples of by-products that could be obtained and add value to the organisation:</p> <ul style="list-style-type: none"> • Polyphenol extracts from marc • Grape seed oil • Tartaric acid from marc • Woody pellets • Biomass for energy production • Stalks for acceleration of composting (biodegradation activator)
Area for action 2.7	Limiting noise and air pollution <i>Recommended indicators:</i> <ul style="list-style-type: none"> • Noise level • Quantification of other air pollutants (particulate matter, volatile organic compounds, ozone, etc.)
Recommendations	<ul style="list-style-type: none"> • Identification of noise sources and noise intensity • Introduction of tools reducing noise emission/intensity (isolation, maintenance, etc...) • Minimising spray drift (type of sprayers, sprayers calibration and maintenance)
Area for action 2.8	Adaptation to climate change and mitigation of climate change <i>Recommended indicators:</i> <ul style="list-style-type: none"> • Quantification of GHG, amount of total CO₂eq and per unit produced

Proposed action 2.8.1.	Explore possible ways of adaptation to climate change
Recommendations	<ul style="list-style-type: none"> • Choice of location of vineyards (cooler places, higher altitudes and higher latitudes) • Adaptation of genetic material (clonal and mass selection, variety recovery, rootstocks, resistant varieties) • Adaptation of production practices must take into account both the factors and/or constraints linked to climate change as well as the specificities of the viticultural products. <p>For example:</p> <ul style="list-style-type: none"> - Planting density - Optimization of the training system - Optimization of crop management - Green operations and harvest regulation - Pruning time (delay vegetative cycle and maturation) and pruning system (dry and green) - Soil management, vegetation cover or minimum tillage - Use and control of water consumption (use of indicators of water status at soil and plant level) • Installation of methods to attenuate effects of extreme phenomena: anti-frost mills, anti-hail nets, shading meshes ... <p>Collective organisations should play a proactive role in the identification of best-practices and suitable strategies.</p>
Proposed action 2.8.2.	Design a strategy to reduce greenhouse gas emissions

Recommendations	<p>Recommendations for vineyard:</p> <ul style="list-style-type: none"> • Proper use of fertilization: Soil analysis, doses adapted to the needs of crops, complementary use of organic and inorganic fertilizers. • Optimization of the use of fertilizers (organic and inorganic). • Crop rotation that optimizes the use of resources (fertilizers, etc.). • green fertilization. • Use of management techniques that avoid organic carbon losses from the soil • Renewable energies: Substitution of diesel boilers for biomass boilers and solar irrigation • Reduction of fuel consumption (improvement in the combustion of agricultural machinery - more efficient tractors from the point of view of gas-oil consumption, electric tractors, and optimization of treatments) • Elimination of the burning of agricultural residues (use as biomass in boilers within an adequate action ratio or incorporating it into the soil) <p>Energy efficiency and renewable energy:</p> <ul style="list-style-type: none"> • Implement an energy audit plan • Use heat or electricity generation systems with renewable energy (solar, biomass, geothermal, etc.) • Installation of meters and electricity consumption control software • Install switches to zone the lighting and adjust the needs of the light space. • Installation of high efficiency lighting systems (e.g. LED, electronic ballasts, ...) • Contract the supply of electrical energy with a renewable energy trading company • Maintain the ambient temperature between 19°C and 21°C in winter and between 24°C and 26°C in summer <p>Improve the efficiency of the production process:</p> <ul style="list-style-type: none"> • Adaptations of oenological protocols • Use of more efficient machinery • Optimization of the operation of refrigeration equipment • Alternative technological solutions (flotation, stabilization with mannoproteins, CMC, co-inoculation, etc.) • Avoid anaerobic purification systems that generate methane • Rationalized use of hot water • Preventive maintenance plan for machinery and equipment <p>Packaging</p> <ul style="list-style-type: none"> • Use of lighter glass bottles • Use of bottles with a higher percentage of recycled glass • Reduction of the weight of the rest of the packaging (elimination of separators, etc.) • Use of FSC / PEFC certified corks and / or cardboard from sustainable forests <p>Supplies:</p> <ul style="list-style-type: none"> • Provision of regional materials in close proximity or transported in less polluting means of transport • Approval and evaluation of suppliers and materials with environmental criteria • Centralization of purchases to avoid unnecessary purchases and guarantee waste reduction policies • Awareness and training plan <p>Distribution and transportation:</p> <ul style="list-style-type: none"> • Use of own eco-efficient vehicles (e.g. hybrid, electric, etc.) • Use of the railway for distribution as an alternative to air and road transport • Promote collective transport for employees (eg public transport, company bus, shared vehicles, etc.) • Promotion of the use of videoconferencing to reduce business trips • Encourage workers to move around on foot or by bicycle (availability of lockers, showers, parking, etc.) • Optimize distribution transport routes • Organize full container loads <p>Facilities design:</p> <ul style="list-style-type: none"> • Avoid insolation of tanks or tubs • Location of the barrel and / or cellar room in a buried area • Favour natural lighting systems • Provide shade to the waiting space of the grape supplying tractors • Placement of thermal insulation on windows, walls, roofs, etc ... • Use of light coloured paints in buildings
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Principle 3: Sustainable vitiviniculture is sensitive to social and cultural aspects

Any sustainable development initiative should consider also the objectives of the entire community: organisations should consider the socio-economic impact of their own activities and should consider getting involved in the socio-economic development of regions (or areas) exploiting the potential of the vitivinicultural sector in maintaining and strengthening social balance.

Vitivinicultural production is first of all an agricultural production of high technicity, requiring specific skills that cannot be delocalized. The vitivinicultural product is also a product that may be seen as a “visit card” of a region, embracing its cultural and geographical specificities that can contribute to the overall promotion and development of the region. In this perspective, the role of collective organisations and cultural associations is most important.

Main challenges for a vitivinicultural organisation under principle 3:

- to preserve local know-how and ensure its transmission;
- to preserve and promote local cultural specificities;
- to ensure stability of the workforce;
- to develop and maintain good relations with the local community and neighbours so as to promote positive image of the vitivinicultural sector;
- to ensure human, social and cultural development associated with the business of grape and wine;
- to create value for the region and/or local community and capture back the value created.
- to preserve and develop attractiveness of the vitivinicultural organisations so as to mobilise and retain competent workforce;
- to motivate the workforce to work for the common goal of the organisation;
- to develop capacities and competencies of the workforce so as to ensure their employability and adaptation to the technological changes;
- Foster quality working conditions allowing for preservation of mental and physical health of the employees and security of the workplace;
- to retain seasonal workers and to perpetuate their know-how.

Role of sectoral bodies

Collective organisations of the vitivinicultural sector, cooperating with cultural associations, should be committed to the following tasks:

- protection of the integrity of vitivinicultural products: modern but based on traditional values;
- promotion of cultural identity;
- preservation of historical know-how;
- collective recognition of historical and cultural value (UNESCO, cultural associations, museums, archeology, etc...)
- promotion of responsible drinking patterns.

Proposed actions that can be undertaken by the organization in implementing Principle 3

Principle 3: Sustainable vitiviniculture is sensitive to social and cultural aspects	
Area for action 3.1	<ul style="list-style-type: none"> • Working conditions/labour practices • <i>Recommended indicators:</i> • Number of employees • % of seasonal employees • Number of created jobs per period (1 year, 5 years, etc...) • Turnover rate of employees • Gender ratio in managerial positions • wage difference between men and women; • rate of job renouncement or demotion as a result of maternity-paternity; • use of parental leave by gender • Inclusion of handicapped employees • Average age of employees • Total duration of sick leaves of employees • Absenteeism rates due to common contingency • Accident rates: frequency and severity index
Proposed action 3.1.1	Employer and employee relationships

Recommendations	<ul style="list-style-type: none"> • The organisation must respect the regulations in force in the country • The organisation is sensitive to the human aspects when making decisions. Management of the organisation is sensibilised to this issue (specific training) • The organisation combats actively all forms of discrimination and harassment: <ul style="list-style-type: none"> - Gender - Disability - Age - Country of origin - Religion - All other forms of discrimination • The organisation establishes transparent, inclusive and fair practices for <ul style="list-style-type: none"> - Recruitment - Career management - Financial (salaries and bonus) and non-financial benefits (health insurance, pension plan - help for day-care, etc...) - Training and education • A welcoming procedure is established so as to facilitate integration of new employees into the team • Integration of disabled people in functions that value their specific skills and are not harmed by the disability. • Social dialogue: set-up all necessary conditions for an efficient dialogue employee/employer • The right to freedom of association and collective agreements is respected. • Apply the above actions independently of the country where employees work but with respect to local specificities and conditions.
Proposed action 3.1.2	Conditions of work and social protection

Recommendations	<ul style="list-style-type: none"> • Respect commitments defined with employees regarding the organisation of work, working hours, annual leave. • Facilitate family conciliation in working conditions • Facilitate certain labour flexibility (flexible hours, change of shifts, reduction of working hours, home office, others) if required • Support especially vulnerable workers (disadvantaged groups, personal or family situations, etc...) • Ensure availability of necessary equipment for safe and efficient work.
Proposed action 3.1.3	Health and safety at work
Recommendations	<ul style="list-style-type: none"> • Identification of possible risks: regular assessment of professional risks (physical risks, socio-psychological risks, professional accidents) associated with the activities of the organisation • Sensitisation, training and prevention actions conducted regularly. Special attention is paid to the seasons of high field activities likely to increase the risk of accidents • Alcohol and addictions in the workplace: sensitization activities conducted regularly
Proposed action 3.1.4	Human development and training at the workplace
Recommendations	<ul style="list-style-type: none"> • Development of capacities and training of employees is planned and organised. • Training needs are identified so as to: <ul style="list-style-type: none"> - Ensure future employability within the organisation (or outside) - Ensure adaptation to technological and regulatory changes • Satisfy relevant requests of employees and managers • Specific attention is paid to the training of less educated employees.
Proposed action 3.1.5	Outsourced activities and working with service providers

Recommendation	<ul style="list-style-type: none"> • The organisation communicates its commitment to sustainable production principles to service providers and privileges those providers also committed to sustainability schemes, applying regular compliance verification routines. • The organization carries out verification of legal compliance in the supply chain activities, including environmental and social issues (for example, compliance with the conventions of the International Labour Organization (ILO)[9] The organisation contributes in its dealings with providers/producers to promote fair and equal relationships
Area for action 3.2	<p>Integration with the local socio-economic and cultural environment</p> <p><i>Recommended indicators:</i></p> <ul style="list-style-type: none"> • Number of actions undertaken to promote social and cultural value of wine and other vitivinicultural products. • Number of stakeholders met • Number of internships • number of local employees • Donations, sponsorships, philanthropic actions • Average duration of contractual relationships with suppliers
Proposed action 3.2.1	Assess, value and promote cultural heritage of the vitivinicultural sector and the specificities of the region
Recommendations	<ul style="list-style-type: none"> • Participation in collective initiatives for protection of vitivinicultural landscapes, cultural heritage and local historical agricultural systems and customs (collective charts, acceptance as world heritage by UNESCO initiatives or as Globally Important Agricultural Heritage Systems (GIAHS) by FAO, etc...) • Participation in collective initiatives aiming at safeguarding / promoting traditions, rituals, drinking patterns, norms linked with responsible wine drinking cultures (e.g. the link of wine with specific diets such as for example Mediterranean diet - UNESCO the Intangible Cultural Heritage of Humanity - 2011) • Participation in initiatives aiming at developing sustainable wine tourism activities • Protection of landscapes - consider local landscapes specificities while developing new vineyards and buildings
Proposed action 3.2.2	Consider and preserve local viticultural and winemaking know-how

Recommendations	<p>Local viticultural and oenological know-how is a notable source for resiliency to be able to face actual and future challenges.</p> <p>To ensure the conservation and transfer of local know-how, the organisation can participate in activities aiming to collect, share and transfer of knowledge and know-how, as for example:</p> <ul style="list-style-type: none"> • Assist young winemakers during their installation (technological advice, transmission of local traditions and insights) • Participation in research and development activities (local research institutions, professional associations) • Encourage the linkage to the territory through Geographical Indications and Appellations of origin (GI/AO), collective trademarks, etc., for example, in participating in the development of guidelines and local specifications. • Participate in local professional organisations aiming at structuring and/or specifying the vitivinicultural production of the area.
Proposed action 3.2.3	Consultations with stakeholders likely to be affected by the operations of the organisation
Recommendations	<ul style="list-style-type: none"> • Be transparent – provide timely and accurate information to the public without endangering the competitive position of the organisation about: <ul style="list-style-type: none"> - purpose, nature and scale of operations - activities, structure, ownership and governance of the organisation - financial situation and performance of the organisation - environmental and social impact assessments - environmental and social impact management plans • Establish balanced grievance mechanisms – simplified and mutually beneficial procedure to settle issues between affected communities and the organisation by helping resolve minor disputes quickly, inexpensively and fairly before they are elevated to formal dispute resolution mechanisms, such as a court of justice.
Proposed action 3.2.4	Ensure economic and social sustainability of the supply chain

Recommendations	<ul style="list-style-type: none"> • Guarantee the existence of written contracts within the supply chain, specifying, among others, payment terms in suitable conditions • Build partnerships with suppliers to ensure fair share of produced value across the whole value chain • Create long-term alliances with suppliers to, among others, offset potential conflicts • Value or prioritize those suppliers with the greatest involvement in social, economic and environmental sustainability.
Proposed action 3.2.5	Value sharing
Recommendations	<ul style="list-style-type: none"> • Explore ways to maximise the positive impacts of operations on local communities to avoid the risk of creating local opposition and to reduce contest costs • Create long-term alliances with stakeholders to offset potential conflicts • Diversify income-generation opportunities <ul style="list-style-type: none"> - participate in collective marketing schemes (ex. Wine routes) - participate in local cultural events - participate in the development and maintenance of local touristic infrastructure: hiking trail, informational boards, wine route, etc... • Capacity development <ul style="list-style-type: none"> - organise training sessions on wine tasting - organise seminars on environmental innovations - external cooperation in regional and trans-regional events • Privilege local procurement and recruitment when possible • Provide better access to the market for local producers, for example by: <ul style="list-style-type: none"> - diversifying the offer of products available for sale in the on-site shop with products from local producers (honey, oil, jellies, biscuits, olives, local handicraft, etc...) - participating in the local direct sales schemes for agricultural products of the region (e.g. AMAP in France, etc...) - making available promotional flyers of touristic activities available in the region

Area for action 3.3	<p>Health and safety of consumers</p> <p><i>Recommended indicators:</i></p> <ul style="list-style-type: none"> • Evolution of risk-management procedures • Number of actions to promote responsible and moderate consumption • Number of claims • Number of product recalls
Proposed action 3.3.1	<p>Integrate food safety of products and processes into its management system, going beyond sanitary regulations in force if necessary (traceability systems, employee training, monitoring, etc.)</p>
Recommendations	<ul style="list-style-type: none"> • Establish the following systems as well as their appropriate management and monitoring mechanisms to guarantee hygiene and security in production, processing and transport: <ul style="list-style-type: none"> - Hazard Analysis and Critical Control Point (HACCP) system (at minimum) - integrated management systems: set up a standard organizational platform, on which "vertical" quality systems are integrated: production hygiene, operator safety, ethical-social, environmental sustainability, etc.; - traceability systems, • Monitor regulatory and technological evolution in relation to potential sanitary risks, to guarantee that processes, ingredients and processing aids used do not represent a risk to the health and safety of consumers • Commit to alternative solutions when a new potential risk is identified as imminent • ensure suitable employee training
Proposed action 3.3.2	<p>Communicate with consumers regarding moderate and responsible consumption</p>

Recommendations	<ul style="list-style-type: none"> • Responsible communication regarding promotion of alcohol consumption – identification of target groups (including employees), adapted communication channels, promotion of moderate consumption • Facilitate a responsible wine experience (e.g. on wine tourism) by providing adapted solutions and new services • Support collective national/local activities and campaigns (e.g. Wine in Moderation Programme) • Report regularly about the actions of social nature developed by the company. • Develop mechanisms to ensure participation and dialogue with stakeholders.
Proposed action 3.3.3.	Ensure adequate labelling of products, especially of allergens and origin of the products.
Recommendations	<ul style="list-style-type: none"> • Prepare documents to support each claim (including those relating to ethical, social and environmental issues)

Principle 4: Sustainable vitiviniculture seeks to maintain economic viability

Sustainability of production also means being economically sustainable. Vitivinicultural organisations should generate sufficient income to competitively remunerate the workforce and the capital invested, while at the same time retaining enough profit to make necessary investments to modernise and adapt its activities to arising changes.

Main challenges for a vitivinicultural organisation under principle 4:

- to optimize the costs of production processes by taking advantage of technological and organizational innovations and increasing their ability to adapt to temporary or structural changes in the factor and product markets;
- to maximize the value of production by creating products that for their intrinsic and extrinsic characteristics make the relationship with consumers continuously profitable.

Role of sectoral bodies

Collective organisations of the sector should facilitate the access to all information necessary for vitivinicultural organisations to face the mentioned challenges.

Principal topics can be summarized as follow:

- economic and organizational aspects of the adoption of relevant technological innovations;
- information on organizational innovations that improve company efficiency;
- qualitative and quantitative information on the market dynamics.

Collective organisations of the sector should stimulate the development of learning networks and the sharing of services to support the management of sustainable production processes from an environmental and social point of view.

Proposed actions that can be undertaken by the organization in implementing Principle 4

Area for action 4.1	Resilience (ability of the organisation to support disruptive pressures ^[10]) <i>Recommended parameters to evaluate:</i> <ul style="list-style-type: none"> • Leadership • Staff engagement • Situation awareness • Decision making • Innovation and creativity • Effective partnerships • Leveraging knowledge • Breaking silos: minimisation of divisive social, cultural and behavioural barriers • Internal resources • Unity of purpose (organisation wide awareness of what the organisation's priorities would be following a crisis) • Proactive posture • Planning strategies • Stress testing plans
Proposed action 4.1.1	Contribute to maintain and/or strengthen organisation's specific identity

Recommendations	<ul style="list-style-type: none"> • Continuously preserve and enhance authenticity of wine and other vitivinicultural products: heritage and pedigree, stylistic consistency, quality commitments, relationship to place, method of production, and downplaying commercial considerations. • Develop actions to identify, recognize and conserve local-generated value in all company sites (heritage, best practices, ideas, stewardship, innovation, etc.)
Proposed action 4.1.2	Creating conditions for prompt adaptation of organisation assets to new technological conditions
Recommendations	<ul style="list-style-type: none"> • Monitoring technological development, including Information technology and computer tools • Developing investment plans • Identifying adapted financial resources and developing financial strategies • Implement knowledge management processes in order to translate technological advancements into the organisation's practices
Proposed action 4.1.3	Constantly improve organisation's structure
Recommendations	<p>Transform the staff in charge for operations into an organization that learns continuously:</p> <ul style="list-style-type: none"> • establishing and communicating a clear sense of direction and purpose; • empowering employees at all levels; • accumulating and sharing internal knowledge; • gathering and integrating external information; • challenging the status quo and enabling creativity. <p>Stabilize relations upward and downward contractually if required</p> <p>Prepare and improve international expansion (if applicable)</p>
Proposed action 4.1.4	Monitor customer satisfaction

Recommendations	<p>The organisation's value proposition should be expanded to the overall experience and not be limited to the "sensorial" satisfaction of the product:</p> <ul style="list-style-type: none"> • Continuously check consumers (segments) expectations and unmet needs. This could potentially create value for both the consumer and the organisation. • Continuously check customer expectations/satisfaction concerning sensory aspects of wine and other vitivinicultural products in key markets <ul style="list-style-type: none"> - carry out regular hedonistic test on representative samples of customers in key target markets. - interview retailers, restaurants, wine lovers, etc... - analyse data from hedonistic tests comparing them with sensory panel and analytic data applying multi-block analysis routines <p>Implement mechanisms to receive and process communications and claims from customers.</p>
Proposed action 4.1.5	Adopt risks prevention tools and procedures
Recommendations	<p>Conduct a comprehensive risk assessment; Adopt risk based thinking Mitigate economic risks:</p> <ul style="list-style-type: none"> • install procedures for regular market follow-up • develop measures to guarantee production levels and reduce the risks that affect the objective for volume and quality of production. • implement responsible investment measures in the organisation. • implement measures to control the debt ratio of the organisation. • develop a business plan to access alternative financing sources to those already available.
Proposed action 4.1.6	Consider risk mitigation tools
Recommendations	<ul style="list-style-type: none"> • Insurance on grape yield • Mutual funds • Income stabilization tools

Area for action 4.2	<p>Efficiency</p> <p><i>Recommended indicators:</i></p> <p>ECONOMIC EFFICIENCY</p> <ul style="list-style-type: none"> • % Return on Equity (ROE) • EBITDA (earnings before interests, taxes, depreciations and amortizations) <p>OPERATIONAL EFFICIENCY</p> <ul style="list-style-type: none"> • % Return on Assets (ROA) • Production efficiency: total inputs value per unit produced • % share of recycled waste integrated in the input stream <p>SOCIAL EFFICIENCY</p> <ul style="list-style-type: none"> • Worker health (sum days of health leave / total annual working days) • Workforce productivity (total worked hours / total production output)
Proposed action 4.2.1	Assess the value created by the organisation and how this value is captured
Recommendations	<ul style="list-style-type: none"> • Tangible and intangible value should be identified and evaluated • Give priority to investments with positive effect (social, environmental and / or economic) in the local community where the company operates.
Proposed action 4.2.2	Apply effective cost control routines both for operations in the vineyard, in the winery or other vitivinicultural infrastructure

Recommendations	<ul style="list-style-type: none"> • Apply structured activity-based costing (ABC) management procedures: <ul style="list-style-type: none"> - identify the standard production costs for vine grapes for fresh consumption, drying or other destinations (by surface unit and by production unit) potentially through “benchmarking” studies and projects, - identify the standard costs for wine production (by production unit, i.e. by bottle or other containers) potentially through “benchmarking” studies and projects, - identify the standard costs of raisins production, preservation of table grapes, production of nectars and/or juices, or other vitivinicultural product (per production unit), possibly through comparative studies and projects - calculate precise actual costs collecting adequate data about manpower and machine allocation among different vineyards, phytosanitary products, oenological products for each production line of the cellar - calculate and investigate differences between actual and standard costs define possible improvement in processes
Proposed action 4.2.3	Support cost control procedures with appropriate actions
Recommendations	<ul style="list-style-type: none"> • Provide technical and economic training for personnel • Adopt advanced IT tools as Enterprise Resource Planning (ERP) • Implement in the information system a registration procedure of data concerning input allocation to different activities in the vineyard, winery or other vitivinicultural infrastructure • Orient the organisation towards principles of Lean Production, introducing Kaizen[11] approach, introduce the use of cross training • Systematically search and eliminate (and/or valorise) inefficiency typically originated by: <ul style="list-style-type: none"> - over-production - wait time - transportation - processing - inventory - motion - defects

Principle 5: Sustainable initiatives require planning and assessment

Sustainable production is a process integrating various aspects and involving the whole organisation. Solid coordination of the whole strategy is required to ensure that all principles of sustainability are taken into consideration and are worked through with comparable intensity.

Main challenges for a vitivinicultural organisation under principle 5:

- organisational policies related to the relevant sustainability principle give meaningful guidance to those within the organisation and those closely linked to the organisation (top-down approach);
- implementation of key-performance indicators concerning how existing and proposed activities may affect the relevant policy goals, in particular concerning the integration of sustainability principles throughout the organisation and the tracking of performance over time;
- scheduling and implementation of appropriate actions to address the negative impacts of decisions and activities (Plan Do Control Adjust (PDCA) cycle);
- all communication provided by the organisation on sustainability has to be complete, understandable, responsive, accurate, balanced, timely and accessible (principle of transparency).

Role of sectoral bodies

Collective organisations of the sector should facilitate the acquisition of the required organisational skills by the vast majority of concerned organisations. In this perspective, collective organisations of the sector could provide specific educational formats designed for small and medium organisations where such skill are usually scarce.

Proposed actions that can be undertaken by the organization in implementing Principle 5

Area for action 5.1.	Planning Assessment / Self-assessment Monitoring and development of knowledge
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Proposed action 5.1.1	<ul style="list-style-type: none"> • Identification and evaluation of relevant stakeholders and delimitation of the direct sphere of influence of the organization • <i>Recommended indicators:</i> • Stakeholders identified (yes/no) • Follow-up and reporting procedures established (yes/no)
Recommendations	<ul style="list-style-type: none"> • Organization's stakeholders are identified according to a chosen methodology. (example proposed in the part 2) • regular dialogue established with the most significant stakeholders • procedure for regular evaluation of stakeholders established
Proposed action 5.1.2	<p>Implementation of sustainable production approach is operational within the organisation</p> <p><i>Recommended indicators:</i></p> <p>analysis of sustainable approach conducted (internally or by independent evaluator)</p>
Recommendations	<p>The following steps should be followed:</p> <ul style="list-style-type: none"> • general strategy developed • responsibilities defined • reporting and follow-up processes established • evaluation and improvement mechanisms established (regular update of established objectives, follow up of best-practices, benchmarking with related organisation mechanisms)
Proposed action 5.2	<p>Responsible and transparent communication</p> <p><i>Recommended indicators:</i></p> <ul style="list-style-type: none"> • Strategy developed: yes/no • Expenditure • Channels of communication used • Impact of communication: • Public concerned (number of followers and subscribers) • Likes and hearts

Recommendations	<p>Install management procedures allowing to ensure:</p> <ul style="list-style-type: none"> • responsible and transparent communication on environmental, social and social aspects of the organization • communicate to consumers and suppliers on key environmental issues and actions of a social nature • responsible and transparent communication related to the quality of products • improve consumers' perception regarding the role of various actors of the vitivinicultural sector in the sustainable management of the environment and rural areas in general
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^[1] Individual or group that has an interest in any decision or activity of an organization (ISO 26000: 2010)

^[2] Individual or group that has an interest in any decision or activity of an organization (ISO 26000:2010)

^[3] All climatic variables and agroclimatic indices mentioned in OIV-VITI 517-2015

^[4] See OIV-VITI 592-2018 resolution

^[5] See the OIV document of collective expertise entitled: "Functional biodiversity in the vineyard"

^[6] See for example OIV recommendations on resolution OIV-VITI 592-2018 – "OIV good practices for minimizing the impacts associated with the application of plant protection products in vineyards"

^[7] "Validated" means that the effectiveness of the protocols has been verified. For example, in the case of Cleaning in Place (CIP) or manual operations of cleaning and sanitation, the organization must have conducted control operations to verify that the time, temperature and concentration of chemical products and all the other relevant parameters can guarantee suitable cleaning and sanitation. The organization must show objective proof of having performed the study, taking into consideration the "worst case scenario".

^[8] Gestion des effluents de cave et de distillerie (OIV, 1990) and Managing by-products of vitivinicultural origin (OIV, 2018).

^[9] The ILO (International Labour Organisation). Conventions are International labor standards which are legally binding international treaties that may be ratified by

member states

^[10] Use for example [OrgRes Tool: The OrgRes Diagnostic is a free online tool offering a quick assessment of organisation's resilience](#)

^[11] Kaizen is an approach of creating continuous improvement based on the idea that small, ongoing positive changes can reap major improvements. Typically, it is based on cooperation and commitment and stands in contrast to approaches that use radical changes or top-down edicts to achieve transformation. Kaizen is core to [lean manufacturing](#), or [The Toyota Way](#). It was developed in the manufacturing sector to lower defects, eliminate waste, boost productivity, encourage worker purpose and accountability, and promote innovation.